

Material Safety Data Sheet (MSDS)

IRON OXIDE BLUE

1. Identification of substance and of the company

Product Name: IRON OXIDE BLUE

2. Composition/Data on components

Chemical characterization:

Synthetic Iron Oxide $\text{Fe}_4[\text{Fe}(\text{CN})_6]_3 \cdot \text{K}_4\text{Fe}(\text{CN})_6$, C. I. Pigment 27, C I No.77492, CAS. No. 14038-43-8
HS Code:2821.1000

Compositions		CAS Number
Fe ₂ O ₃	55%	1309-37-1
PigmentBlue	11%	12239-87-1
Water	1%	7732-18-5
SiO ₂	11%	7631-86-9
Al ₂ O ₃	11%	1344-28-1
CaSO ₄	11%	7778-18-9

Dangerous components:

None

3. Hazards identification

*****Emergency Overview*****

May cause mechanical irritation to the eyes, skin and respiratory tract, Irritating gases/fumes may be given off during burning or thermal decomposition.

HMIS Codes: H=1, F=1, R=0, P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

Eyes: Non-irritating to the eyes. Excessive exposure to airborne dust may reduce visibility and /or cause unpleasant deposits.

Skin: will not irritate skin and is not likely to cause allergic skin reaction. Injury to the skin or mucus membranes can occur by direct mechanical action or by rigorous skin cleaning necessary for removal of dust.

Other effects: none known.

Not a hazard in normal industrial use. No harmful effects observed.

The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/584/EEC

Or amendments.

4. First Aid measures

First aid for skin: In case of skin contact, immediately flush skin with water. Wash clothing before reuse. Call a physician if irritation occurs.

First aid for ingestion: Immediately contact a physician.

First aid for eyes: Flush eyes with plenty of water, lifting lids periodically for at least 15 minutes. Consult a physician if irritation persists.

First aid for inhalation: Remove from dusty area to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

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5. Fire fighting measures

Product is non-combustible.

Upper Explosive Limit (UEL): Will not explode.

Lower Explosive Limit (LEL): Will not explode.

Fire Fighting Instructions: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes and smoke inhalation.

Suitable extinguishing media : Material is not combustible. Use extinguishing media suitable for other combustible materials in the area.

Special hazards caused by the material, its combustion products or resultant gases: none

Flash point: Not applicable.

Auto-ignition temperature : Not applicable.

6. Accidental release

Environmental protection conduct: Do not sweep or wash into public stretches of water, sewers or sites of unknown discharge paths

After spillage/leakage/gas leakage:

Clean up immediately with wetting or absorbent material avoiding dusting

7. Handling and storage

Handling:

Usual precautions for nuisance dust should be observed.

Protection against fire and explosion:

The product is non-flammable

Storage:

Store in roofed places at room temperature. Keep containers tightly sealed.

Flammability Class: not applicable

8. Exposure controls/personal protection

Additional notes for design of plant equipment:

No further details, see sec. 7

Components with workplace-related limits to be monitored:

Designation	%	Type of data	Unit
Nuisance dust	100	MAK	6 mg/m ³
Personal protection equipment:		TLV/TWA(USA)	10 mg/m ³

Respiratory protection:

An appropriate dust filter has to be used if a breathable dust is liberated.

9. Physical and chemical properties

form: Powder

colour: Blue

odour: odourless

	Value/Area	Unit	Method
Change in physical state			
Thermal Decomposition:	n.a.	°C	Lit.
Flash point: not flammable			
Flammable properties: The product is not flammable under standardized conditions.			
Explosion risks: The product is not explosive			
Vapour pressure:	n.a.	mbar	
Density: (20°C)	4,1	g/cm ³	DIN/ISO787part10B
Solubility in water: (20°C)	<0,5	%	DIN/ISO787part3
PH-Value: (at 100g/lHO) ² (20°C)	ca.3.5~7		DIN/ISO787part9



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10. Stability and reactivity

Hazardous Polymerization: Will not occur.

Stability: Stable Material.

Incompatibilities: None known.

Instability conditions: None known.

Decomposition temperature: Greater than 120 C.

Decomposition products: None known.

11. Toxicological Information

Because of experiences with the product mentioned, there are no recognizable hazards for human beings, If it is correctly used and applied.

12. Ecological information

Avoid infiltration into waster drainings or soil.

13. Disposal considerations

Product:

Dispose in accordance with federal, state and local regulations.

Waste Code No.:

Check re-use as alternative.

Contaminated packages and containers:

Emptied, but contaminated packages and containers may be recycled.

Waste Code No.: 18715 (Germany)

14. Transport information

International:

Land transport: ADR/RID/GGVS/GGVE: NotRegulated

Sea transport: IMDG/GGVSeeUN-No.: NotRegulated

Air transport: ICAO/IATAUN/ID-No.: NotRegulated

U.S. D.O.T.Classification: NotRegulated

CANADA Transport of dangerous goods: Not Regulated

DOT Shipping Name: None

Technical Shipping Name: Inorganic Oxide

DOT Hazardous Classification: Non-Regulated. This product is not classed as a dangerous substance under the Classification, Packaging and Labeling of Dangerous Goods Act.

DOT Hazard Class: Non-Regulated.

DOT Identification Number: None

DOT Labels required: None

DOT Placards required: None. No specific transportation precautions required.

UN Class: None.

UN/NA Number: None.



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15. ~~Regulatory information~~

~~Labeling according to EEC Directives:~~ Not Regulated.

SARA

SARA 312:

Health :Immediate(Acute):	No*	Fire:	None
Delayed(Chronic):	No**	Reactivity:	None
		Suddenreleaseofpressure:	None

Not an acute hazard, however may cause irritation due to abrasiveness.

These products are not classified as Carcinogens by the National Toxicology Program, the International Agency for Research on Cancer or the Occupational Safety and Health Administration. We do not know of any chronic health effect from these products. The finished pigment is a fine powder and may increase the risk of respiratory and skin disorders aggravated by dust.

The product is not a substance subject to mandatory marking in accordance with the EEC Directive 67/548/EEC or amendments.

Water risk class: WGK 0 (Self-assessment, acc. to §§7a 19,19a-1 of German Water Utilization Act (WHG))

16. ~~Further information~~:

HMIS Codes: H=1, F=1, R=0, P=0 (0=Minimal, 1=Slight, 2=Moderate, 3=Serious, 4=Severe)

Vertical markings at left margin denote alterations of previous issue.

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Department issuing this data sheet: Product safety department